



Indiana Department of Environmental Management
Office of Water Quality
Wetlands Section

Publication Date:
August 5, 2008

IDEM ID Number:
2008-290-45-MTM-A

Closing Date:
August 26, 2008

Corps of Engineers ID Number:
Not Available

PUBLIC NOTICE

To all interested parties:

This letter shall serve as a formal notice of the receipt of an application for **Section 401 Water Quality Certification** by the Indiana Department of Environmental Management (IDEM). The purpose of the notice is to inform the public of active applications submitted for water quality certification under Section 401 of the Clean Water Act (33 U.S.C. § 1341) and to solicit comments and information on any impacts to water quality related to the proposed project. IDEM will evaluate whether the project complies with Indiana's water quality standards as set forth at 327 IAC 2.

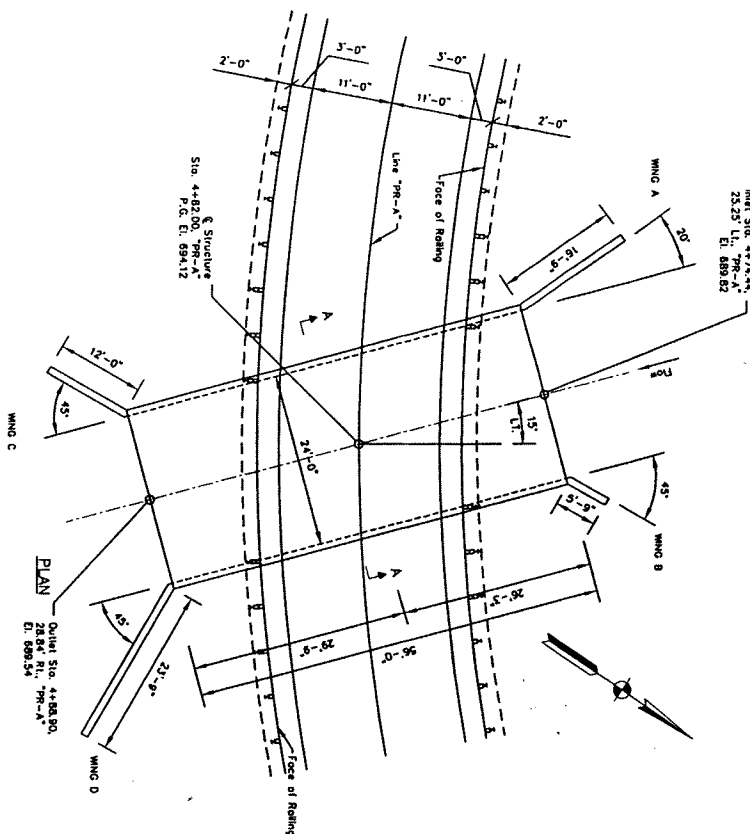
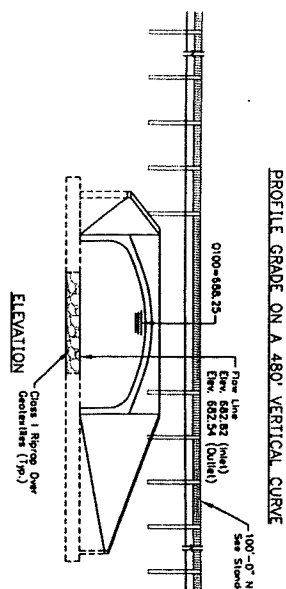
- | | | | |
|----------------------|---|------------------|--|
| 1. Applicant: | Mr. Duane Alverson
Lake County Highway Department
1100 East Monitor Street
Crown Point, IN 46307 | 2. Agent: | Ms. Summer O'Brien
RW Armstrong
Union Station, 300 S. Meridian St.
Indianapolis, IN 46225 |
|----------------------|---|------------------|--|
- 3. Project location:** Sections 35,2; Townships 34 North, 33 North; Range 9 West of the Lowell U.S.G.S. Quadrangle, Lake County. From I-65 exit 240, head west on SR 2; right on SR 55; left on 153rd Ave.; right at Morse St.; right on 149th Ave.
- 4. Affected waterbody:** Cedar Creek, Unnamed Tributary (UNT) to Cedar Creek, Emergent wetland.
- 5. Project Description:** The applicant proposed to replace the existing 21' long bridge carrying 149th Ave. over Cedar Creek with a 24' long, 9' rise, 56' wide three-sided concrete arch structure with wingwalls. Impacts below the Ordinary High Water Mark (OHWM) and wetlands include: 0.001 acre impact to an emergent wetland; approx. 90 linear feet (LFT) of impact to Cedar Creek (0.30 cubic yards of clean fill and 156 cubic yards); and 30 LFT of relocation of an UNT of Cedar Creek (8' south of its present location). Total proposed impacts are approximately 0.053 acre.

Comment period: Any person or entity who wishes to submit comments or information relevant to the aforementioned project may do so by the closing date noted above. Only comments or information related to water quality or potential impacts of the project on water quality can be considered by IDEM in the water quality certification review process.

Public Hearing: Any person may submit a written request that a public hearing be held to consider issues related to water quality in connection with the project detailed in this notice. The request for a hearing should be submitted within the comment period to be considered timely. The request should also state the reason for the public hearing as specifically as possible to assist IDEM in determining whether a public hearing is warranted.

Questions? Additional information may be obtained from Ms. Sarah McKeown, Project Manager, at 317-234-6351. Please address all correspondence to the project manager and reference the IDEM project identification number listed on this notice. Indicate if you wish to receive a copy of IDEM's final decision. Written comments and inquiries may be forwarded to -

Indiana Department of Environmental Management
100 North Senate Avenue
MC65-42 WQS IGCN 1255
Indianapolis, Indiana 46204-2251
FAX: 317/232-8406



PROFILE GRADE ON A 480' VERTICAL CURVE

100-0 Nested Cuadroil FOR 25-0 Span
See Standard Drawing 601-NWGA01 thru 03

DESIGN DATA

Use Loads: HS25-44 Loading With Impact And Distribution Of Loads In Accordance With 2002 AASHTO Standard Specifications And All Current Interim.

Dead Loads: Actual Weight Plus 35 Lbs./Sq.ft. For Future Wearing Surface.

Design Strengths:

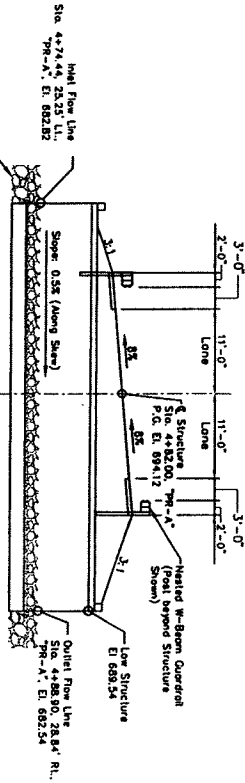
Class "C" Concrete F_c	= 4,000 psi
Class "A" Concrete F_c	= 3,000 psi
Class "B" Concrete F_c	= 3,000 psi
Reinforcing Steel F_y	= 60,000 psi

GENERAL NOTES

Concrete In Structure Shall Be Class "C".
Concrete In Footings Shall Be Class "B".
Wetproof Outside of Box Culvert In Accordance With Standard Specification 702.23. Two Coats Required.
Chamber Exposed Edges 1" Unass Noted.
Alternative For Top 20'-10": 15' Slaw Lt. May Be Substituted For The Structure Indicated.

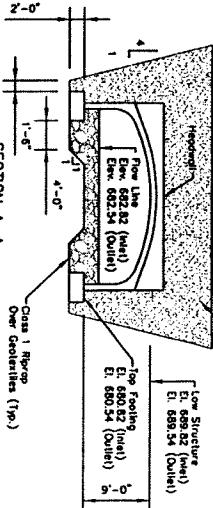
DESIGN PARAMETER	3 SIDED BOX CULVERT
Bearing Materials	Medium Silt to Stiff Sandy Loam
Allowable Bearing Pressure	3,000 psf
Backfill Friction Angle (ϕ)	17°
Foundation Soil Internal Friction Angle (ϕ)	N/A
Friction Factor (μ)	N/A
Ultimate Adhesion Between The Soil and Concrete (c_u)	1,500 psf
Ultimate Corrosion	1,800 psf

RECOMMENDED SOIL PARAMETERS
FOR WINGWALL DESIGN



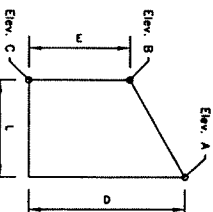
TYPICAL SECTION

•Dimensions & Grades 1 To Alignment



SECTION A-A

-Class 1 Riprap
Over Geotextiles (Typ.)



WING DETAIL

Not To Scale

Location	Wing A	Wing B	Wing C	Wing D
Elev. A	691.65	691.65	691.37	691.37
Elev. B	687.82	687.82	686.54	687.54
Elev. C	680.82	680.82	680.54	680.54
Dm. D	11'-10"	11'-10"	11'-10"	11'-10"
Dm. E	8'-0"	8'-0"	7'-0"	8'-0"
Dm. L	16'-9"	5'-9"	12'-0"	23'-9"
Area (sq. ft.)	115.8	39.8	77.0	164.2
				Total
				396.8

PRE-CAST REINFORCED CONCRETE 3-SIDED BOX CULVERT
24'-0" SPAN, 9'-0" RISE, SKEW: 15° LEFT

RECOMMENDED FOR APPROVAL _____		DESIGN ENGINEER _____		DATE _____
DESIGNED _____	NOB _____	DRAWN _____	SEA _____	
CHECKED _____	SPH _____	CHECKED _____	TDL _____	

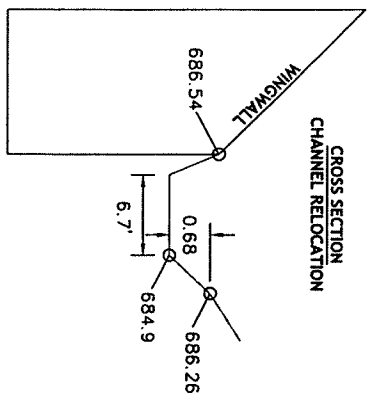
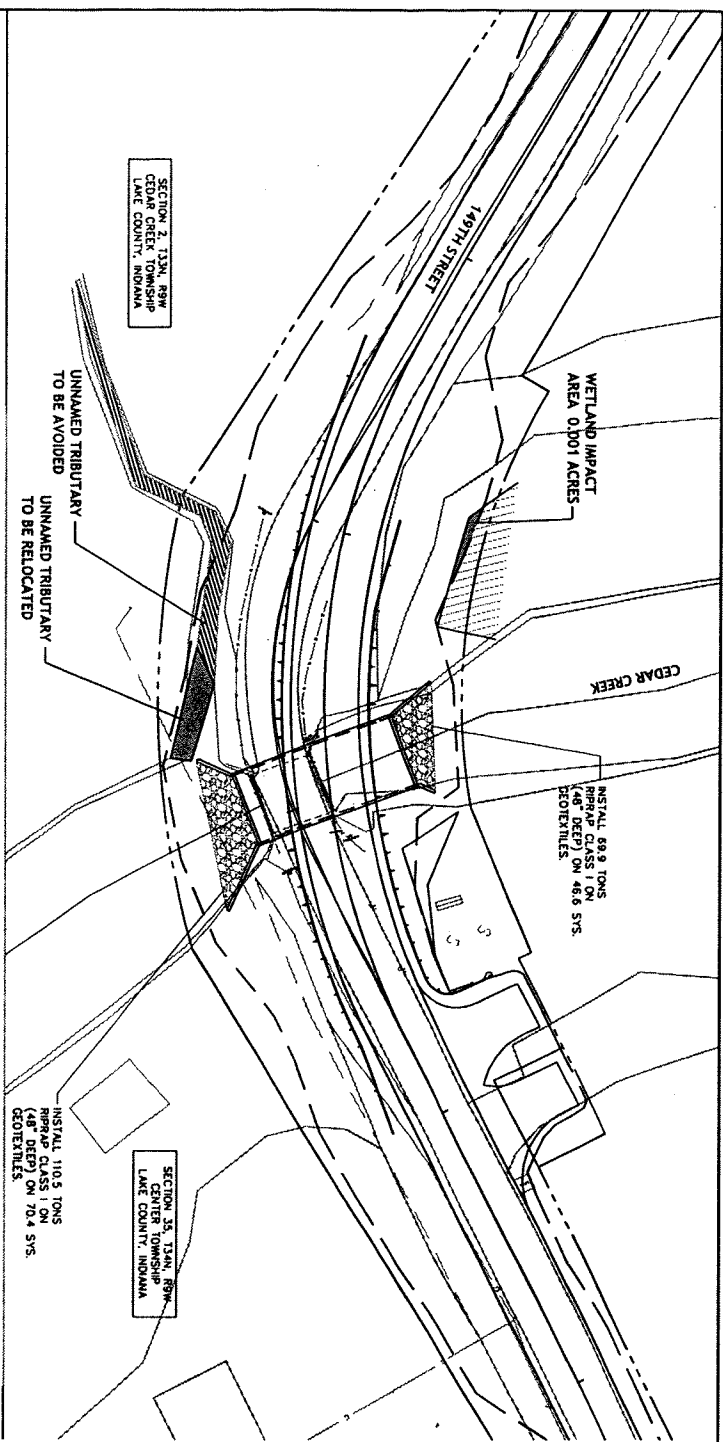
ARMSTRONG

Union Station / 300 S. Meridian St.
Indianapolis, IN 46225
tel 317.708.0441 / fx 317.708.0957
cwa@msi10ng.com

GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	LANE COUNTY BRIDGE 99
VERTICAL SCALE	DESIGNATION
CONTRACT	SHEET
	7 of 21
	PROJECT

ARMSTRONG
Union Station / 100 S. Meridian St.
Indianapolis, IN 46225
tel 317.786.0461 / fax 317.788.0957
www.armstrong.com



HYDRAULIC DATA

DRAINAGE AREA	10.0 SQ. MI.
0100 DISCHARGE	375 CFS
0100 ELEVATION	667.60
0100 BACKWATER	0.43 FT.
0100 VELOCITY	3.00 FT./SEC.
WATERWAY OPENING PROVIDED (BELOW 0100)	117.50 SQ. FT.
LOW STRUCTURE ELEVATION	689.54
EXISTING WATERWAY OPENING (BELOW 0100)	66.50 SQ. FT.
EXISTING LOW STRUCTURE ELEVATION	689.54
EXISTING BACKWATER	0.53 FT.

EARTHWORK

COMMON EXCAVATION:	926 CYS.
USABLE WATERWAY EXCAVATION (70% FILL + 30% BORROW)	312 CYS. 1,687 CYS.
STRUCTURE BACKFILL	429 CYS.
**BENCHING (ESTIMATE)	487 CYS.
WATERWAY EXCAVATION	98 CYS.
	445 CYS.

EXISTING STRUCTURE

THE EXISTING STRUCTURE IS A SINGLE SPAN STEEL BEAM BRIDGE, 21'-0" LONG WITH A CONCRETE DECK AND TIMBER SUBSTRUCTURE, BUILT IN 1970. TO BE REMOVED.

UTILITIES

GAS & ELECTRIC:
MPSCO
20 S. JOSEPH STREET
CROWN POINT, IN 46307
ATTN: LINE DEPARTMENT

TELEPHONE
SBC
220 N. MERIDIAN STREET
INDIANAPOLIS, IN 46204
800-237-0902

TOWN OF CEDAR LAKE
8550 LAKE SHORE DR.
CEDAR LAKE, IN 46303
219-374-4445

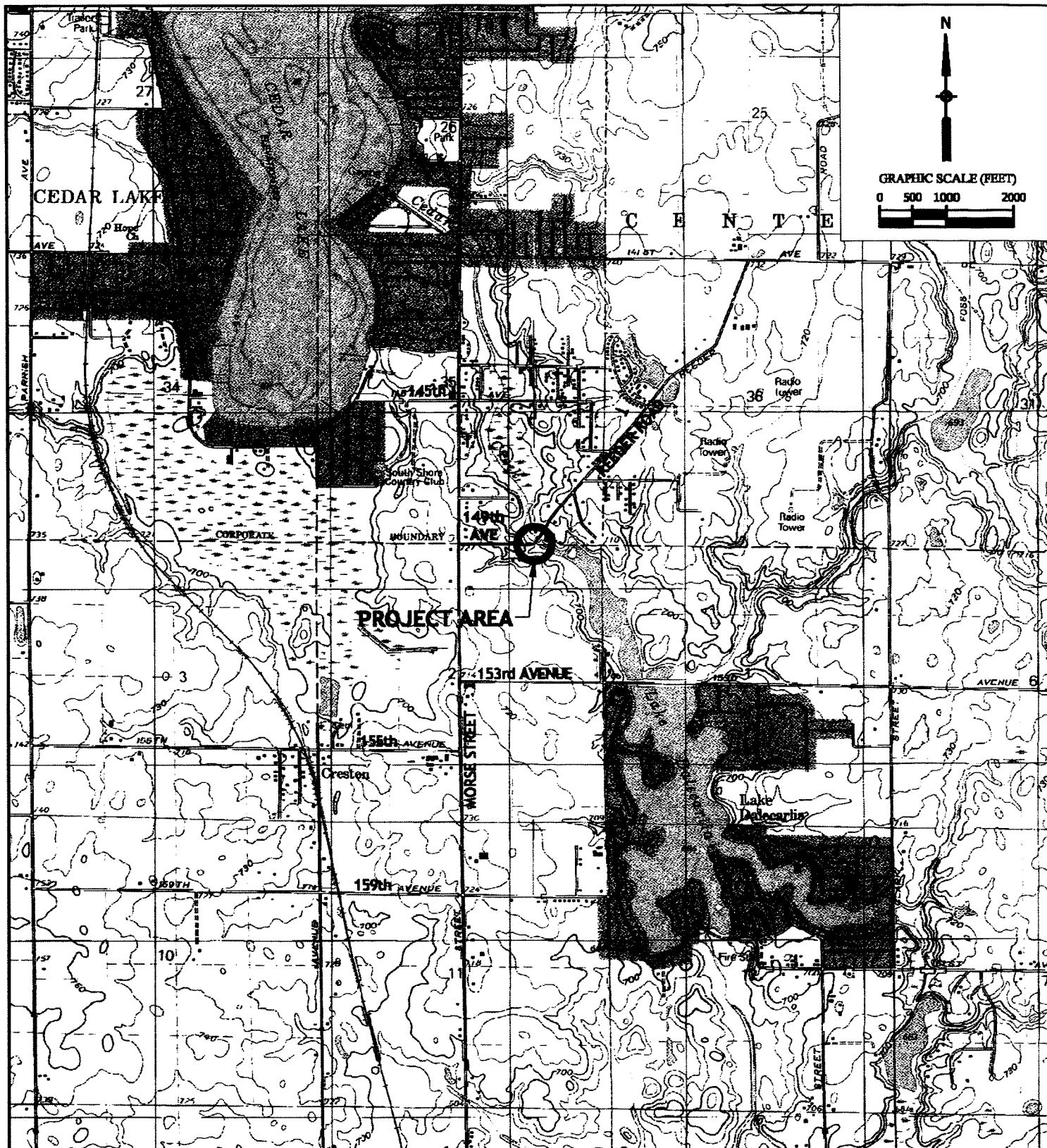
NOTES:
ALL R/W SHALL BE AS SHOWN
ALL R/W DESCRIBED FROM LINE "PR-A" EXCEPT AS NOTED

**PRE-CAST REINFORCED CONCRETE
3-SIDED BOX CULVERT**

26-0 CLEAR ROADWAY, 15° SKEW LT.
ON REIDER ROAD OVER CEDAR CREEK IN LAKE
COUNTY

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DRAWN _____	CHECKED _____	
CHECKED _____		

LAKE COUNTY	HORIZONTAL SCALE	BROOD FILE
	1"=20'	
WETLAND IMPACT EXHIBIT	VERTICAL SCALE	LAKE COUNTY BROOD 95
		DESCRIPTION
	CONTRACT	9-4-EET
		21
		23
		PRODUCT



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Union Station / 300 S. Meridian St.
 Indianapolis, IN 46225
 PH 317.786.0461 // FX 317.788.0957
 rwArmstrong.com

BRIDGE #95 ON 149th AVENUE

USGS 7.5 MINUTE QUADRANGLE MAP - LOWELL, IN

LOCATION MAP

MARCH 2008